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| 10/068,422 | 02/06/2002 | Mark Yarkosky | 1653 | 9566 |

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| EXAMINER |
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FOX, JAMAL A

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| ART UNIT | / PAPER NUMBER |
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2664

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,422

Applicant(s)

YARKOSKY, MARK

Examiner

Jamal A. Fox

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-17 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 18-24 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 25 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/11/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-6, 18, 19 and 21-24 rejected under 35 U.S.C. 102(b) as being anticipated by West (U.S. Patent No. 5,574,979).

Referring to claim 1, West discloses a method for managing communications in a wireless network (wireless networks, col. 4 lines 28-45), the method comprising:

measuring (measured, col. 62 lines 45-48) at least one level of interference (interference, col. 6 lines 1-6) over an air interface;

based on the at least one level of interference (interference, col. 6 lines 1-6) over the air interface, selecting a data rate (data rate, col. 11 lines 22-36 and col. 23 lines 23-37) for signals transmitted from the first entity to at least one second entity; and

causing the signals from the first entity to the at least one second entity to be transmitted at the data rate (data rate, col. 11 lines 22-36 and col. 23 lines 23-37).

Referring to claim 3, West discloses the method of claim 1, wherein the at least one level of interference is energy-to-interference (interference, col. 6 lines 1-6) over the air and the at least one second entity is one second entity.

Referring to claim 4, West discloses the method of claim 1, further comprising: based on the least one level of interference (interference, col. 6 lines 1-6), selecting a

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transmit power (transmit power, col. 37 lines 50-55) for signals transmitted from the first entity to one of the at least one second entity to be transmitted at the transmit power.

Referring to claim 5, West discloses the method of claim 1, further comprising causing separate signals from one of the at least one second entity to the first entity to be transmitted at a separate transmit power (transmit power, col. 37 lines 50-55).

Referring to claim 6, West discloses the method of claim 1, further comprising causing separate signals from the at least one second entity to the first entity to be transmitted at a separate data rate (data rate, col. 11 lines 22-36 and col. 23 lines 23-37).

Referring to claim 18, West discloses a base station (base station, col. 1 lines 25-60, col. 5 lines 60-65, col. 11 lines 22-66, col. 12 lines 5-37 and col. 61 lines 15-40) comprising:

a processor (processor, col. 5 lines 47-60, col. 56 lines 10-60, col. 59 lines 15-20, col. 60 lines 33-56 and col. 61 lines 5-10);

memory (memory, col. 5 lines 45-50, col. 56 lines 50-60, col. 59 lines 5-10 and col. 62 lines 35-40);

computer instructions stored in the memory (memory, col. 5 lines 45-50, col. 56 lines 50-60, col. 59 lines 5-10 and col. 62 lines 35-40) and executable by the processor for performing the functions of:

- (i) measuring (measured, col. 62 lines 45-48) at least one level of interference (interference, col. 6 lines 1-6) over an air interface;

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- (ii) based on the at least one level of interference (interference, col. 6 lines 1-6) over the air interface, selecting a data rate (data rate, col. 11 lines 22-36 and col. 23 lines 23-37) for signals transmitted from the base station (base station, col. 1 lines 25-60, col. 5 lines 60-65, col. 11 lines 22-66, col. 12 lines 5-37 and col. 61 lines 15-40) to at least one entity; and
- (iii) causing the signals from the base station (base station, col. 1 lines 25-60, col. 5 lines 60-65, col. 11 lines 22-66, col. 12 lines 5-37 and col. 61 lines 15-40) to the at least one second entity to be transmitted at the data rate (data rate, col. 11 lines 22-36 and col. 23 lines 23-37).

Referring to claim 19, West discloses the base station of claim 18, wherein the data rate (data rate, col. 22 lines 54-67) selected from the group consisting of approximately a full data rate and approximately a $\frac{1}{2}$ rate.

Referring to claim 21, West discloses the base station of claim 18, wherein the at least one level of interference (interference, col. 6 lines 1-6) is energy-to-interference over the air interface and the at least one entity is one entity.

Referring to claim 22, West discloses the base station of claim 18, wherein the computer instructions further perform the functions of:

based on the at least one level of interference (interference, col. 6 lines 1-6), selecting a transmit power for signals transmitted from the base station (base station, col. 1 lines 25-60, col. 5 lines 60-65, col. 11 lines 22-66, col. 12 lines 5-37 and col. 61 lines 15-40) to one of the at least one entity; and

causing the signals from the base station (base station, col. 1 lines 25-60, col. 5 lines 60-65, col. 11 lines 22-66, col. 12 lines 5-37 and col. 61 lines 15-40) to the one of the at least one entity to be transmitted at the transmit power (transmit power, col. 37 lines 50-55).

Referring to claim 23, West discloses the base station of claim 22, wherein the computer instructions further perform the function of causing separate signals from one of the at least one entity to the base station (base station, col. 1 lines 25-60, col. 5 lines 60-65, col. 11 lines 22-66, col. 12 lines 5-37 and col. 61 lines 15-40) to be transmitted at a separate transmit power (transmit power, col. 37 lines 50-55).

Referring to claim 24, West discloses the base station of claim 18, wherein the computer instructions further perform the function of causing separate signals from the at least one entity to the base station (base station, col. 1 lines 25-60, col. 5 lines 60-65, col. 11 lines 22-66, col. 12 lines 5-37 and col. 61 lines 15-40) to be transmitted at a separate data rate (data rate, col. 11 lines 22-36 and col. 23 lines 23-37).

3. Claims 18, 20 and 21 rejected under 35 U.S.C. 102(b) as being anticipated by Saints et al. (U.S. Patent No. 6,097,972).

Referring to claim 18, Saints et al. discloses a base station comprising:
a processor (Fig. 1 ref. sign 34, col. 4 lines 20-51);

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memory (memory, col. 7 line 55 – col. 8 line 3);

computer instructions (instructions, col. 7 lines 55-67) stored in the memory and executable by the processor for performing the functions of:

- (i) measuring at least one level of interference (interference, col. 1 lines 35-42) over an air interface;
- (ii) based on the at least one level of interference (interference, col. 1 lines 35-42) over the air interface, selecting a data rate for signals transmitted from the base station (base station, col. 3 lines 50-65) to at least one entity; and
- (iii) causing the signals from the base station (base station, col. 3 lines 50-65) to the at least one second entity to be transmitted at the data rate.

Referring to claim 20, Saints et al. discloses the base station of claim 18, wherein the at least one level of interference is aggregate energy (aggregate energy, col. 3 lines 60-65) -to-interference over the air interface and the at least one entity is a plurality of entities.

Referring to claim 21, Saints et al. discloses the base station of claim 18, wherein the at least one level of interference (interference, col. 1 lines 35-42) is energy-to-interference (interference, col. 1 lines 35-42) over the air interface and the at least one entity is one entity.

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3, 6, 18, 21 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Li et al. (U.S. Patent Application Publication No. 2002/0163879).

Referring to claim 1, Li et al. discloses a method for managing communications in a wireless network, the method comprising:

measuring (measured, [0047]) at least one level of interference (interference, [0047]) over an air interface;

based on the at least one level of interference (interference, [0047]) over the air interface, selecting (selection, [0041]) a data rate for signals transmitted from the first entity to at least one second entity; and

causing the signals from the first entity to the at least one second entity to be transmitted at the data rate (data rate, [0058], [0075] and [0092]).

Referring to claim 3, Li et al. discloses the method of claim 1, wherein the at least one level of interference (interference, [0047]) is energy-to-interference over the air and the at least one second entity is one second entity.

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Referring to claim 6, Li et al. discloses the method of claim 1, further comprising causing separate signals from the at least one second entity to the first entity to be transmitted at a separate data rate (data rate, [0058], [0075] and [0092]).

Referring to claim 18, Li et al. discloses a base station (base station, [0028], [0031], [0032], [0033], [0035] and [0036]) comprising:

a processor (processor, [0134]);

memory (memory, [0021]);

computer instructions stored in the memory (memory, [0021]) and executable by the processor for performing the functions of:

- (i) measuring (measured, [0047]) at least one level of interference (interference, [0047]) over an air interface;
- (ii) based on the at least one level of interference (interference, [0047]) over the air interface, selecting a data rate (data rate, [0058], [0075] and [0092]) for signals transmitted from the base station (base station, [0028], [0031], [0032], [0033], [0035] and [0036]) to at least one entity; and
- (iii) causing the signals from the base station (base station, [0028], [0031], [0032], [0033], [0035] and [0036]) to the at least one second entity to be

transmitted at the data rate (data rate, [0058], [0075]
and [0092]).

Referring to claim 21, Li et al. discloses the base station of claim 18, wherein the at least one level of interference (interference, [0047]) is energy-to-interference over the air interface and the at least one entity is one entity.

Referring to claim 24, Li et al. discloses the base station of claim 18, wherein the computer instructions further perform the function of causing separate signals from the at least one entity to the base station (base station, [0028], [0031], [0032], [0033], [0035] and [0036]) to be transmitted at a separate data rate (data rate, [0058], [0075] and [0092]).

6. Claims 1-6, 18 and 20-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Lundby (U.S. Patent Application Publication No. 2002/0111183).

Referring to claim 1, Lundby discloses a method for managing communications in a wireless network (Fig. 1 and respective portions of the spec.), the method comprising:

measuring (measure, [0025] and [0033]) at least one level of interference (interference, [0023] and [0025]) over an air interface;

based on the at least one level of interference (interference, [0023] and [0025]) over the air interface, selecting a data rate (data rate, [0025], [0035] and [0042]) for signals transmitted from the first entity to at least one second entity; and

causing the signals from the first entity to the at least one second entity to be transmitted at the data rate (data rate, [0025], [0035] and [0042]).

Referring to claim 2, Lundby discloses the method of claim 1, wherein the at least one level of interference (interference, [0023] and [0025]) is aggregate energy (aggregate energy, [0035])-to-interference over the air and the at least one second entity is a plurality of second entities.

Referring to claim 3, Lundby discloses the method of claim 1, wherein the at least one level of interference is energy-to-interference (interference, [0023] and [0025]) over the air and the at least one second entity is one second entity.

Referring to claim 4, Lundby discloses the method of claim 1, further comprising: based on the least one level of interference (interference, [0023] and [0025]), selecting a transmit power (transmit power, [0024], [0029], [0030] and [0049]) for signals transmitted from the first entity to one of the at least one second entity to be transmitted at the transmit power (transmit power, [0024], [0029], [0030] and [0049]).

Referring to claim 5, Lundby discloses the method of claim 1, further comprising causing separate signals from one of the at least one second entity to the first entity to be transmitted at a separate transmit power (transmit power, [0024], [0029], [0030] and [0049]).

Referring to claim 6, Lundby discloses the method of claim 1, further comprising causing separate signals from the at least one second entity to the first entity to be transmitted at a separate data rate (data rate, [0025], [0035] and [0042]).

Referring to claim 18, Lundby discloses a base station (base station, [0007] and [0008]) comprising:

a processor (processor, [0008] and [0052]);

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memory (memory, [0053]);

computer instructions (software, [0053]) stored in the memory (memory, [0053])

and executable by the processor for performing the functions of:

- (i) measuring (measure, [0025] and [0033]) at least one level of interference (interference, [0023] and [0025]) over an air interface;
- (ii) based on the at least one level of interference (interference, [0023] and [0025]) over the air interface, selecting a data rate (data rate, [0025], [0035] and [0042]) for signals transmitted from the base station (base station, [0007] and [0008]) to at least one entity; and
- (iii) causing the signals from the base station (base station, [0007] and [0008]) to the at least one second entity to be transmitted at the data rate (data rate, [0025], [0035] and [0042]).

Referring to claim 20, Lundby discloses the base station of claim 18, wherein the at least one level of interference (interference, [0023] and [0025]) is aggregate energy (aggregate energy, [0035]) -to-interference over the air interface and the at least one entity is a plurality of entities.

Referring to claim 21, Lundby discloses the base station of claim 18, wherein the at least one level of interference (interference, [0023] and [0025]) is energy-to-interference over the air interface and the at least one entity is one entity.

Referring to claim 22, Lundby discloses the base station of claim 18, wherein the computer instructions further perform the functions of:

based on the at least one level of interference (interference, [0023] and [0025]), selecting a transmit power (transmit power, [0024], [0029], [0030] and [0049]) for signals transmitted from the base station (base station, [0007] and [0008]) to one of the at least one entity; and

causing the signals from the base station (base station, [0007] and [0008]) to the one of the at least one entity to be transmitted at the transmit power (transmit power, [0024], [0029], [0030] and [0049]).

Referring to claim 23, Lundby discloses the base station of claim 22, wherein the computer instructions further perform the function of causing separate signals from one of the at least one entity to the base station (base station, [0007] and [0008]) to be transmitted at a separate transmit power (transmit power, [0024], [0029], [0030] and [0049]).

Allowable Subject Matter

7. Claims 9-17 are allowed.

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8. Claims 7, 8, 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-3143. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 2600 Customer Service whose telephone number is (571) 272-2600.

A handwritten signature in black ink, appearing to read 'Jamal A. Fox', written in a cursive style.

Jamal A. Fox

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WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER